

Plex 4/10/2018 1:46 PM Date Due/Rec'd

PO No	Supplier Ref No	Line Item No	Term	Purchased Item	Description	For Project	Equipment ID	Order No	Qty	Date Due	Received	Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit
PO39521	AC001-VC	1	Net 30	M1018R1125	M1018R1125:	MATERIAL: AISI 1018-1025 ROUND BAR	MATERIAL: AISI 1018-M101820GA AS PER MIL-S-7097 OR ASTM A108 receive R	20	4/12/2018	20	SO59685	Stock	4/10/2018	\$ 3.24 / ft			
		2		M1A51-T-	A513 Seamless Alloy Steel Round Tubing 0.875" dia. x 1.12" Wall	MATERIAL: AISI 1018-A513 TPE 5	MATERIAL: AISI 1018SEAMLESS ALLOY STEEL ROUND TUBING (DOL) AS PER MIL-S-7097 OR ASTM A108 receive R	60		69	SO59686	Stock	4/10/2018	\$ 2.06 / ft			
		3		M6061T6B1000X04000	6061-T6 Bar 0.00 X 4.00 :	T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QCA-2258 OR AMS-QQ-A-2258 OR AMS-A2200/8 OR AMS-A160 QCA-21284115116 OR A41171284115116 OR	T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QCA-2258 OR AMS-QQ-A-2258 OR AMS-A2200/8 OR AMS-A160 QCA-21284115116 OR A41171284115116 OR	24		24	SO59687	Stock	4/10/2018	\$ 13.25 / ft			
		4		M340R0375	34 Round Bar 0.375 :	MATERIAL: AISI 4136 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive R	MATERIAL: AISI 4136 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive R	24		6	SO59688	Stock	4/10/2018	\$ 1.19 / ft			
		5		MT-HRS-B-0.500X2.250	HOT Rolled Steel Bar 0.500" X 2.250" :MATERIAL: HOT ROLLED STEEL	0.500" X 2.250" :MATERIAL: HOT ROLLED STEEL BAR AS PER ASTM A36 OR ASTM A1018 receive R	0.500" X 2.250" :MATERIAL: HOT ROLLED STEEL BAR AS PER ASTM A36 OR ASTM A1018 receive R	6		6	SO59689	Block	4/10/2018	\$ 6.70 / ft			
		6		MT-1144-H0.250	MT-1144 Stressproof Steel Hex Bar 0.250" :	MT-1144 Stressproof Steel Hex Bar 0.250" :MATERIAL: UNS G1140	MT-1144 Stressproof Steel Hex Bar 0.250" :MATERIAL: UNS G1140	12		12	SO59690	Stock	4/10/2018	\$ 5.77 / ft			
		7		MT-1144-H0.500	MT-1144 Hot rolled :	MT-1144 Hot rolled :	MT-1144 Hot rolled :	20		24	SO59691	Stock	4/10/2018	\$ 1.18 / ft			
		8		MT-4140-R0.625	MT-4140-R0.625 :	MTL SPECS AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 20 RC MAXIMUM ROCKWELL C = 35 RC AS PER ASTM A29. AMS 6349. AMS 6382. AMS 6629	MTL SPECS AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 20 RC MAXIMUM ROCKWELL C = 35 RC AS PER ASTM A29. AMS 6349. AMS 6629	186		199							

Purchasing Receipts

4/10/2018



Dart Hawkesbury
1270 Aberdeen St, Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Print

PURCHASE ORDER

PO039521

Supplier: AC1001-VG
Acer Oulette Inc.
935 Boul. Du Havre
Valleyfield QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

Tel (613) 632-5200



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

PO No.: PO039521

PO Date:
4/6/18
Due Date:
4/12/18

Ship To:
1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada

Comments: QUOTE: SOU0093923, SOU0097336
Phone: 613-632-5200
Special Terms:
Freight Terms:
Net 30
Via:
Ground
Paymt Terms:
Net 30
Shipt-To Contact:
LaVoie, ChantalPhone:
clavoile@darraero.com

M1018R1.125
MATERIAL: AISI 1018-
1025 ROUND BAR
M1010S20GA AS PER
MIL-S-7097 OR ASTM
A108
receive fl

Line Item	Part	Supplier	Part No	Description	Status	Due Date	Received	Quantity	Balance	Unit Price (CAD)	Extended Price
1	M1018R1.125	MAT-A513-T-	0.875W0.120	A513 Seamless Alloy	Steel Round Tubing	60 ft	0 ft	60 ft	\$2.0595/ft	\$123.57	
2					MATERIAL: AS PER ASTM A513 TYPE 5 (1020/1026)SEAMLESS ALLOY STEEL ROUND TUBING (DOM) AS PER ASTM A513 TYPE 5 Steel Round Tubing 0.875"dia. x 0.120" Wall	60 ft	0 ft	60 ft	\$2.0595/ft	\$123.57	
3	M6061T6B1.000X04.000		6061-T6 Bar 1.00 X 4.00	Firmed 4/12/18	24 ft	0 ft	24 ft	\$13.245416/ft	\$317.89		
4	M304R0.375		304 Round Bar 0.375	Firmed 4/12/18	24 ft	0 ft	24 ft	\$1.1879166/ft	\$28.51		

Line Item Note: NOTE CUT BAR IN HALF 2 PCS 10 FT

Line Item Note: APR 10 2019

Line	Item	Part	Supplier	Part No	Description	Status	Due	Order Quantity	Quantity	Balance	Unit Price (CAD)	Extended Price
Items												
5	MT-HRS-B-0.500X2.250	Hot Rolled Steel Bar			Firmed 4/12/18	6 ft	0 ft	6 ft	\$6.69667/ft	\$40.18		
6	MT-1144-H0.250	0.500" X 2.250"			Firmed 4/12/18	12 ft	0 ft	12 ft	\$5.77/ft	\$69.24		
7	MT-1144-H0.500	AISI 1144 Stressproof Steel Hex Bar 0.250"			Firmed 4/12/18	20 ft	0 ft	20 ft	\$1.1755/ft	\$23.51	DAS 11 9-89	
8	MT-4140-R0.625	MATL SPECS. Steel Hex Bar 0.250"			Firmed 4/12/18	20 ft	0 ft	20 ft	\$2.87/ft	\$57.56	DAS 11 9-89	

Plex 4/6/18 2:44 PM dat.lavie.chatnai

Procurement Quality Clauses	AO05 height of entry	AO12 chemical and physical test report	AO16 personnel qualification	AO17 raw material identification (as applicable)	AO26 certification of material conformance	AO41 quality management system	AO42 defect notification by supplier	AO43 retention of quality documents	AO49 supplier awareness
Order Notes									

Terms & Conditions of Purchasing(Supplier) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.daratecplace.com for further explanation.



DELIVERY - CLIENT

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

CO00082609

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Instruction F-M

Alt : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Product Description	Weight	Qty	U/M	PCS NB				Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C	OUT

Conditions :

All sold and delivered materials remain the property of "Acer Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acer Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acer Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 36.22**NIR : R109516-6**

Prepared By :	Verified By :	Delivered By :	Time									Total (\$CAD)
												Date

Customer's Signature


ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5656 Mtl: 514-336-4246 Ext.: 866-456-4248

Order - Factory

CO000082609

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Shipped to

Customer N°
Date
Delivery date
Your order N°
Processed by
Salesman
Carrier
Credit Terme

CL10001056
2018/04/06
2018/04/12 12:00:00 AM
39521
Josianne Bourdon

Product Description

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 ROUND 4140 HEAT TREAT 5/8 (R) R4140-58H 1 X 28/HEAT: 75061935 TRANSIT ST-JEROME LE 09/04	20.86	20.00	PI_\$CLB	1.00						
3 ROUND STRESSPROOF 1/4 RANDOM NS RST-14-V 1 X 12' AC15037-GR-09/04 heat to follow				0.00						
4 ROUND STRESSPROOF 1/2 (R) RST-12 2 x 12' heat number 20504590	2.00	12.00	PI_\$CLB	1.00						
	13.36	20.00	PI_\$CLB	1.00						
				\$ 0.00						

Total Weight (LBS) : 36.22**NIR :** R-109516-6**Conditions :**

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

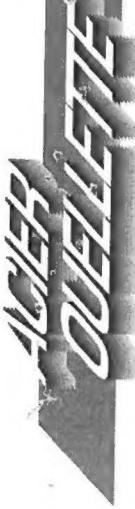
Customer's Signature

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Total (\$CAD)
Deposit
Balance

174.31
0.00
174.31



DELIVERY - CLIENT

Copy CO000822603

ACIER OUELETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

DART AEROSPACE LTD
Billed to
Shipped to
Customer N°

Josiann Bourdon

Date

2018/04/10
Your order N°

Delivery date

39521

Your order N°

Josianne Bourdon

Processed by

OUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Salesman

Credit Térme

1

Page

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route

5

Delivery Route

1

Internal Use Only

IN

OUT

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OUT

DAS

9-89

11

DAS

9-89



Order - Factory

C00082609

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
Total Weight (LBS) : 36.22									NIR : R-109516-6	
Conditions :										
"Aster Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Aster Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.										
Prepared By :	Verified By :	Delivered By :	Time	Customer's Signature	Y	M	D			
Total (\$CAD)	174.31	Deposit:	0.00	Balance	174.31					

Conditions:

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and/or permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 5% restocking charge.

Total Weight (LBS): 36.22

NIR : R-109516-6

Customer's Signature	Y	M	D
Delivered by:	Time		
Printed by:			

Total (\$CAD)	174.31
Deposit	0.00
Balance	174.31

CERTIFICATE OF TEST	
Customer Order Number 14-AUG-2017	Customer Order Number 0001
Invoice Number T127467	CUSTOMER ORDER NUMBER 501719
Description: STRESSPROOF® CF BAR ASTM A311 CL B 1/4 RD x 12' R/L	FRANCINE CUSTOMER PART NUMBER 0001
Line Total: 11 LB ITEM: 501719	STANDARD CAST MATERIAL IS FREE FROM MARKUP CONTAMINATION NO WELD REPAIR PERFORMED ON MATERIAL
COMMENTS GRANIT PRACTICE COARSE SOURCE/MELTED CHARTER STEEL - OHIO (USA) RED. RATIO 997.8:1 MELTED & MFG IN USA	

MANUFACTURERS PURCHASING

 Terry GALBRAITH
 Material did not contain any deleterious substances or impurities which would render it unsatisfactory for construction purposes. A full report will be furnished to the customer upon request.
 We hereby certify that the material covered by this report will meet the applicable specifications described herein, including any specification forming a part of the description of the material.
 The results contained on the basis of examination.

NAGARA LASALLE CORPORATION											
1412 160th Street, Hammond IN 46327-1799											
CERTIFICATION											
DATE 08/11/17		PAGE 2		PURCHASE ORDER #99740							
CERTIFICATE H180769		ITEM 1105001325P4		CUSTOMER ITEM V715371							
GRADE STRESSPROOF(R)		SHAPE Round		LENGTH 110" / 12' 6" LENGTH MM 3362.8 / 3840							
HEAT		SOURCE / MELTED		SPEC/REV: ASTM A108-13 SPEC/REV: ASTM A29/A29M-16 SPEC/REV: ASTM A311-A(2010) CLASS B							
20504590		CRASE		CHARTER STEEL - OHIO (USA) STRAND 249.5:1 DI							
CHEMISTRY											
0.410	1.360	.013	.279	0.190	0.050	0.100	.020	.150	.001	.002	N
.007	N/A	A5	N/A	N/A	PP	SE	BI	B	NB	NB	MECHANICAL
LOT	108	TENSILE	2% YIELD	131,930 PSI	103,107 PSI	ELONG	R OF A	HARDNESS	.02% YIELD	SR TENS	HS45598
LOT	108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5484326
LOT	108	WEIGHT (LBS)	WEIGHT (LBS)	3.830	4.69	PRICE/S	PRICE/S	WEIGHT (LBS)	WEIGHT (LBS)	PIECES	HS45598
CERTIFICATE OF TEST BY Waller P. Kretzler - Director of QA/Chief Metallurgist											
WE, hereby certify that these goods were produced in compliance with all applicable requirements of sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders of the United States Department of Labor issued under section 14 thereof. Metall was not exposed to mercury or any metal alloy that is liquid at ambient temperature during processing or while in our possession. No weld repairs performed on the above metal.											

MEDIDA	OP	COLADA	Rodamiento	Largo de recto	Alargamiento	Tensión de recto	Carril N.	Número	Tensión de recto	Tensión de recto	Dureza HR	Hardness	Efecto de la humedad	Características mecánicas / Mecánicas propiedades		
														EN 10277	Notas :	
31,75	137240	407676	525,92	512,03	25,00	176,00	47,11									Brigüet steel products. Technical delivery conditions.
12,70	137245	408785	600,00	559,00	15,10	190,00	0,00									EN 10277 Products Characteristics de acero. Conditions techniques de livraison.
25,40	137450	40439 SR	511,00	358,00	33,30	185,00	0,00									ALBIRAN 45927
22,23	137508	40771 G	625,03	599,51	24,20	185,00	0,00									Clients Note Nr.
12,70	137555	40878 S	600,00	559,00	15,10	190,00	0,00									ALBIRAN 45927
31,75	137558	40919 G	581,40	581,48	0,00	176,00	0,00									Productos Calidad/Qualité
12,70	137561	38275 A	653,05	639,55	19,38	210,00	0,00									Norma : EN 10277
15,88	137561	40759 G	636,99	639,00	16,07	193,80	0,00									Productos Calidad/Qualité
25,40	137713	40652 G	591,90	576,41	25,44	176,00	0,00									Productos Calidad/Qualité
28,58	137568	40816 G	581,48	581,48	0,00	190,00	0,00									Productos Calidad/Qualité
25,40	137713	40910 G	568,80	568,80	32,76	169,00	0,00									Productos Calidad/Qualité
9,53	137736	40673 GM	684,30	684,30	16,54	169,80	0,00									Productos Calidad/Qualité
7,94	137748	40859 OC	548,10	518,80	210,00	159,00	0,00									Productos Calidad/Qualité
12,70	137748	40859 OC	548,10	518,80	11,92	159,00	0,00									Productos Calidad/Qualité
15,88	137729	40956 G	585,51	565,74	15,42	172,00	0,00									Productos Calidad/Qualité
63,50	137732	40929 W	410,00	234,00	25,80	0,00	0,00									Productos Calidad/Qualité
82,55	137733	40345 IS	0,00	0,00	0,00	0,00	0,00									Productos Calidad/Qualité
19,50	202238	40817 AG	580,62	566,97	19,96	185,00	0,00									Productos Calidad/Qualité
28,58	138186	40440 SR	501,00	350,00	29,00	0,00	0,00									Productos Calidad/Qualité

DESCRIPTION		Clave	OP	Clave	EN 10277-1
12,14 RED. ESTIRADO 31,75 (1/14)	137240	137240	RED. ESTIRADO 31,75 (1/14)	137240	RED. ESTIRADO 31,75 (1/14)
1018 RED. ESTIRADO 22,23 (7/8)	137208	137208	RED. ESTIRADO 22,23 (7/8)	137208	RED. ESTIRADO 22,23 (7/8)
1018 RED. ESTIRADO 31,75 (1/14)	137240	137240	RED. ESTIRADO 31,75 (1/14)	137240	RED. ESTIRADO 31,75 (1/14)
1018 RED. ESTIRADO 12,70 (1/2)	137558	137558	RED. ESTIRADO 12,70 (1/2)	137558	RED. ESTIRADO 12,70 (1/2)
1018 RED. ESTIRADO 15,88 (5/8)	130937	130937	RED. ESTIRADO 15,88 (5/8)	130937	RED. ESTIRADO 15,88 (5/8)
1018 RED. ESTIRADO 23,40 (1/2)	137561	137561	RED. ESTIRADO 23,40 (1/2)	137561	RED. ESTIRADO 23,40 (1/2)
1018 RED. ESTIRADO 25,40 (1/2)	137713	137713	RED. ESTIRADO 25,40 (1/2)	137713	RED. ESTIRADO 25,40 (1/2)
1018 RED. ESTIRADO 28,58 (1/8)	137590	137590	RED. ESTIRADO 28,58 (1/8)	137590	RED. ESTIRADO 28,58 (1/8)
1018 RED. ESTIRADO 30,40 (1/2)	202250	202250	RED. ESTIRADO 30,40 (1/2)	202250	RED. ESTIRADO 30,40 (1/2)
12,14 RED. ESTIRADO 34,50 (3/4)	137736	137736	RED. ESTIRADO 34,50 (3/4)	137736	RED. ESTIRADO 34,50 (3/4)
12,14 RED. ESTIRADO 35,50 (3/4)	137732	137732	RED. ESTIRADO 35,50 (3/4)	137732	RED. ESTIRADO 35,50 (3/4)
12,14 RED. ESTIRADO 36,50 (2 1/2)	137729	137729	RED. ESTIRADO 36,50 (2 1/2)	137729	RED. ESTIRADO 36,50 (2 1/2)
12,14 RED. ESTIRADO 38,58 (5/8)	137736	137736	RED. ESTIRADO 38,58 (5/8)	137736	RED. ESTIRADO 38,58 (5/8)
12,14 RED. ESTIRADO 40,50 (1/2)	137740	137740	RED. ESTIRADO 40,50 (1/2)	137740	RED. ESTIRADO 40,50 (1/2)
12,14 RED. ESTIRADO 42,55 (3/4)	137733	137733	RED. ESTIRADO 42,55 (3/4)	137733	RED. ESTIRADO 42,55 (3/4)
12,14 RED. ESTIRADO 45,05 (3/4)	137732	137732	RED. ESTIRADO 45,05 (3/4)	137732	RED. ESTIRADO 45,05 (3/4)

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CERTIFICADO DE CALIDAD/QUALITY REPORT

ARANAY LUPARDO, 2
48490 UGADO-MIRAVALLS/VIZCAYA (SPAIN)
Tfno.: 946480211
Fax: 946480128
Email: calibradores@calibradorespradeira.es
www.calibradorespradeira.es



De acuerdo a / Made according to:
EN 10204/DIN 50049

ALBARAN 45927	DETALLE NÚM.:	CLIENTE LES ACTIERS TRANSBEC (1997) LTBE	PRODUCTOS de acero. Condiciones técnicas de suministro.	Norma:	BRITISH STEEL PRODUCTS. Technical delivery conditions Distribuidor: BARREAS DE ACERO ESTIRADAS / TORNADAS EN FINO SIN ALTAIR
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DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.
QUALITY DEPARTMENT: Certify that the product fulfills the order specifications.

Fechas/Días: 09/02/2017 Firmado: Santiago Fernández Director de Calidad



Direc^{teur} Qualité
Danièle Pelleter

Sincerely yours truly

date : 2017-03-31

ASTM B-221-14 except for section 8.2 (number of specimens).

Nous certifions que les matériaux fournis rencontrent les exigences chimiques telles qu'annoncées par la norme ASTM B-221-4 excepté pour la section 8.2 [nombre de spécimen].

Si	Fe	Cu	Mn	Mg	Cr	Zn	II
6063	0.20-0.60	0.35 Max	0.10 Max	0.45-0.90	0.10 Max	0.10 Max	
6005	0.60-0.90	0.35 Max	0.10 Max	0.40-0.60	0.10 Max	0.10 Max	
6005A	0.66-0.74	0.35 Max	0.10 Max	0.40-0.60	0.10 Max	0.10 Max	
6061	0.40-0.80	0.70 Max	0.15 Max	0.80-1.20	0.04-0.35	0.25 Max	0.15 Max
6351	0.7-1.3	0.5 Max	0.10 Max	0.40-0.80	0.40-0.80	—	0.20 Max

Composition chimique typique / Typical chemical composition :

Rockwell E hardness : 93 HRE **Min. required : 88 HRE**

Coulee / Cast #: 68708

Logfile / Control #: 86430-1

Alliage & tempérage / Alloy & temper: 6061 T

Alliage & tempérage / Alloy & tempering : 6061 T6

Description: 4.00" X 1.00" FLAT BAR

7827 311 : # 015 / 05-2008 #

Bon de commande / Purchase order # : OU-47427

COMMERCIAL SABPA / SABPA ORDER #: 7021578

H7L5R2

LAVAL, QC

Adresse / Address : 4054 BOUL. LE CORBUSIER # 201

LES ACIERS TRANSBEC (1997) LTÉE.

Test de dureté Rockwell

:edes

51124

165 876

$$FAL = 14/12$$

1087#

325 Rue Avro
Pointe-Claire, QC, Canada H9R 5W3
Telephone (514) 697-5120
Facsimile (514) 694-8310

ERDEMİR ÇELİK FABRİKASI LTD. ŞTİ.
OUTSTANDING CAPITAL 3.500.000.000 TL
PRODUCTION PLANT ERDEMİR

TEST CERTIFICATE
EN 10284 - 2004 TYPE 3.1

DATE 18/10/2017
CERTIFICATE NO. 716126517
PAGE NO. 3

CUSTOMER

ORDER NO.

WIRTH STEEL

78603208709

12.700 X 2430 X 6096 { 0.500 X 96 X 240 INCH }

(CSA G40.21-13 / ASTM A52-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)

LINK: HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO. 1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATIONS

TICKET NO/WEIGHT (MT)	HEAT NO	COIL CR PLATE NO	P.S or P.P TEST YIELD STRENGTH N/mm2	TENSILE TEST % TESTI EL VAL	BEAD or BH TESTI EL VAL	IMPACT TEST at 20°C Position HARDNESS VAL	YIT or HARDNESS VAL	MECHANICAL TESTS						CHEMICAL COMPOSITION, CAST ANALYSIS						
								Ag	VIT	High TEMP °C	Low TEMP °C	C %	Mn %	P %	S %	Si %	Al %	Cu %	Ni %	V %
0237039602 3.40	735246	7352462010420	TT 409.9	573.7	36															
		70230182501C1G	2																	
0237039603 3.00	735248	7352482040410	TT 399.1	561.9	38															
		7352482040420	2	395.1	561.9	38														
0237039604 3.050	735353	70230183471010	TT 437.4	591.3	32															
		735353209053101	2																	
0237039605 3.050	735353	73535320905320	TT 437.4	591.3	32															
		73535320905320	2																	
0237042307 13.970	735252	73525220640310	TT 433.5	587.4	32															
		73525220640320	2	433.5	587.4	32														
0237042307 13.970	735252	702302298611010	TT 424.6	572.7	32															
		716634	71663420501010	2																
0237042307 13.970	716634	71663420501020	TT 424.6	572.7	32															
		716634	71663420501030	2																
0237042307 13.970	716634	71663420501040	TT 424.6	572.7	32															
		716634	71663420501050	2																
0237042307 13.970	716634	71663420501060	TT 424.6	572.7	32															
		716634	71663420501070	2																
0237042307 13.970	716634	71663420501080	TT 424.6	572.7	32															
		716634	71663420501090	2																
0237042307 13.970	716634	71663420501100	TT 424.6	572.7	32															
		716634	71663420501110	2																
0237042307 13.970	716634	71663420501120	TT 424.6	572.7	32															
		716634	71663420501130	2																
0237042307 13.970	716634	71663420501140	TT 424.6	572.7	32															
		716634	71663420501150	2																
0237042307 13.970	716634	71663420501160	TT 424.6	572.7	32															
		716634	71663420501170	2																
0237042307 13.970	716634	71663420501180	TT 424.6	572.7	32															
		716634	71663420501190	2																
0237042307 13.970	716634	71663420501200	TT 424.6	572.7	32															
		716634	71663420501210	2																
0237042307 13.970	716634	71663420501220	TT 424.6	572.7	32															
		716634	71663420501230	2																
0237042307 13.970	716634	71663420501240	TT 424.6	572.7	32															
		716634	71663420501250	2																
0237042307 13.970	716634	71663420501260	TT 424.6	572.7	32															
		716634	71663420501270	2																
0237042307 13.970	716634	71663420501280	TT 424.6	572.7	32															
		716634	71663420501290	2																
0237042307 13.970	716634	71663420501300	TT 424.6	572.7	32															
		716634	71663420501310	2																
0237042307 13.970	716634	71663420501320	TT 424.6	572.7	32															
		716634	71663420501330	2																
0237042307 13.970	716634	71663420501340	TT 424.6	572.7	32															
		716634	71663420501350	2																
0237042307 13.970	716634	71663420501360	TT 424.6	572.7	32															
		716634	71663420501370	2																
0237042307 13.970	716634	71663420501380	TT 424.6	572.7	32															
		716634	71663420501390	2																
0237042307 13.970	716634	71663420501400	TT 424.6	572.7	32															
		716634	71663420501410	2																
0237042307 13.970	716634	71663420501420	TT 424.6	572.7	32															
		716634	71663420501430	2																
0237042307 13.970	716634	71663420501440	TT 424.6	572.7	32															
		716634	71663420501450	2																
0237042307 13.970	716634	71663420501460	TT 424.6	572.7	32															
		716634	71663420501470	2																
0237042307 13.970	716634	71663420501480	TT 424.6	572.7	32															
		716634	71663420501490	2																
0237042307 13.970	716634	71663420501500	TT 424.6	572.7	32															
		716634	71663420501510	2																
0237042307 13.970	716634	71663420501520	TT 424.6	572.7	32															
		716634	71663420501530	2																
0237042307 13.970	716634	71663420501540	TT 424.6	572.7	32															
		716634	71663420501550	2																
0237042307 13.970	716634	71663420501560	TT 424.6	572.7	32															
		716634	71663420501570	2																
0237042307 13.970	716634	71663420501580	TT 424.6	572.7	32															
		716634	71663420501590	2																
0237042307 13.970	716634	71663420501600	TT 424.6	572.7	32															
		716634	71663420501610	2																
0237042307 13.970	716634	71663420501620	TT 424.6	572.7	32															
		716634	71663420501630	2																
0237042307 13.970	716634	71663420501640	TT 424.6	572.7	32				</td											

ERDEMIN VE ÇELİK FABRİKASI
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMIR

TEST CERTIFICATE

EN 10204 2004 TYPE 3.1

WIRTH STEEL

:78503201709

DIMENSIONS, mm : 12.700 X 2430 X 6066 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMIR 3246)
PRODUCT TYPE & DEFINITION : LKK HOT ROLLED HEAVY PLATE WITH MUL EDGE

LOT NO.: 11 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/HEAT NO	COIL NO	MECHANICAL TESTS			CHEMICAL COMPOSITION CAST ANALYSIS											
		P.S. OR PLATE NO	TENSILE TEST OR TEST BH STRENGTH EL VAL. N/mm2	Ag YIT HARD NESS VAL.	IMPACT TEST POSITION: 1 2 3 VAL.	HIGH TEMP °C	C %	W %	P %	S %	Si %	Al %	CU %	N %	V %	N PPM
Q237042311/13.560	70230229651019	9	TT 441.3 590.4 32				0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342060410	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342060420	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070016	TT 424.5 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070120	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070010	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070010	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070020	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070010	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342070010	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
0237042318/12.360	702302297201010	8					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 441.3 590.4 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050320	TT 424.6 572.7 32					0.193	246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	7166342050310	TT 441.3 590.4 32					0.193	246	0.022	0.004						

ERDEMİR - ÇELİK FABRİKASI
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE
EN 10204 2004 TYPE 3.1

CUSTOMER : WIRTH STEEL

ORDER NO : 78603200709

DIMENSIONS, mm : 12.700 X 2438 X 6066 (0.500 X 96 X 240 INCH)

STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR59 TYPE 2(ERDEMİR 3246)

PRODUCT TYPE & DEFINITION : LRK - HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO: 1
NO MERCURY COMPOUNDS. NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/WEIGHT (KG)	HEAT NO	COIL or PLATE NO	P.S. or P.P.	TENSILE TEST		BEND TEST or TEST BH TEST EL TEST IVAL TEST IVAL	Y/T or HARD NESS	A9 TEST BH TEST EL TEST IVAL TEST IVAL	IMPACT TEST or TEST POSITION	HIGH TEMP 1 2 3	AVR TEMP C C/N/M2	YIELD C C/N/M2
				TEST	TEST							
0237042323/12 350	716634	71663420400210	TT	441 3	590 4	32				10 193 1 246 3 022 0 004 0 206 0 033 0 027 0 049 0 075	45	
	716634	71663420400220	TT	441 3	590 4	32				0 193 1 246 3 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400310	TT	424 6	572 7	32				IC 193 1 246 0 022 0 004 0 205 0 033 0 027 0 049 0 075	49	
	716634	71663420400320	TT	424 6	572 7	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400416	TT	451 3	550 4	32				10 193 1 246 0 022 0 004 0 205 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400419	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	441 3	590 4	32				10 193 1 246 0 022 0 004 0 206 0 033 0 027 0 049 0 075	49	
	716634	71663420400420	TT	429 5	583 9	34				10 187 1 217 0 021 0 006 0 168 0 035 0 026 0 044 0 076	49	
	716634	71663420400420	TT	427 5	534 3	34				10 187 1 217 0 021 0 006 0 168 0 035 0 026 0 044 0 076	49	
	716634	71663420400420	TT	427 6	584 5	38				0 187 1 217 0 021 0 006 0 168 0 035 0 026 0 044 0 076	40	
	716634	71663420400420	TT	420 5	563 9	34				0 187 1 217 0 021 0 006 0 168 0 035 0 026 0 044 0 076	40	
	716634	71663420400420	TT	429 5	563 9	34				0 187 1 217 0 021 0 006 0 158 0 036 0 028 0 044 0 075	40	
	716634	71663420400420	TT	427 5	584 5	38				0 187 1 217 0 021 0 006 0 163 0 036 0 028 0 044 0 076	40	
	716634	71663420400420	TT	427 6	584 5	38				0 187 1 217 0 021 0 006 0 163 0 036 0 028 0 044 0 076	40	
	716634	71663420400420	TT	427 6	584 5	38				0 187 1 217 0 021 0 006 0 163 0 036 0 028 0 044 0 076	40	
	716634	71663420400420	TT	427 6	575 7	34				0 181 1 261 0 022 0 004 0 156 0 026 0 025 0 044 0 076	45	
	716634	71663420400420	TT	432 5	575 7	34				0 181 1 261 0 022 0 004 0 158 0 026 0 025 0 044 0 076	45	

WE THE MANUFACTURER HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF
CSA G40.21-13 / ASTM A572-15 300W/350W : GR59 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS

WE THE MANUFACTURER HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF
CSA G40.21-13 / ASTM A572-15 300W/350W : GR59 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS



ERDEMİR ÇELİK FABRİKASI

DEMEVİN ÇELİK FABRİKASI
DENİZLİ İL LABORATUVASI
20.09.2006
117

ERDEMİR ÇELİK FABRİKASI
DENİZLİ İL LABORATUVASI
20.09.2006
117

ERDEMİR

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NOT: İ.T.C. M.Midd. E.Eng. T. Transver. L. Logistural. P. S. Piece of Silice. P.Piece of Plate
MEVIS Number: Istanbul, Head Office: C552/5065-426-1402 Trade Registry Number: 90653 Trade Registry Number: 15373
Head Office: Istanbul, Barcas Mah. Arslan Sok. No: E 34746 Ataköy - İSTANBUL - TURKEY

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ERDEMİR ÇELİK FABRİKALARI LTD. ŞTİ.
OUTSTANDING CAPITAL : 3.300.000.000 TL
TEST CERTIFICATE
EN 10204 - 2004 TYPE 3.1

CUSTOMER
ORDER NO.

WIRTH STEEL
78603200709
DIMENSIONS, mm : 12.700 X 2438 X 6096 { 0.500 X 36 X 240 INCH |
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO:1
NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATIONS

TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	MECHANICAL TEST		YIT or HARD NESS	IMPACT TEST, JUKE POSITION	HIGH TEMP VAL	AIR TEMP VAL	YIELD TEMP VAL	CHEMICAL COMPOSITION CAST ANALYSIS							
				BEND TEST	YIELD TEST						%	Si	Mn	P	S	N	PPM	
0237042338 6.190	727036	7270320-00210	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.029	0.018	0.042	0.073
	727036	7270320-C0220	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	7270320-A0310	TT	432.5	575.7	34					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	7270320-B03320	TT	432.5	575.7	34					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703520A00410	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703520A00420	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	7023022992010	7023022992010	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703620B04101	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703620B0420	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703620B0410	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	727036	72703620B0420	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	70230229940101	70230229940101	TT	408.9	581.5	32					0.181	0.261	0.004	0.198	0.028	0.018	0.042	0.073
	716634	71663420D0101	TT	424.6	572.7	32					0.193	0.246	0.004	0.206	0.033	0.027	0.049	0.075
	716634	71663420A0120	TT	424.6	572.7	32					0.193	0.246	0.004	0.206	0.033	0.027	0.049	0.075
	716634	71663420B00410	TT	441.3	590.4	32					0.193	0.246	0.004	0.206	0.033	0.027	0.049	0.075
	716634	71663420B00420	TT	441.3	590.4	32					0.193	0.246	0.004	0.206	0.033	0.027	0.049	0.075
	727037	72703720B03010	TT	415.8	573.7	36					0.193	0.264	0.004	0.197	0.033	0.022	0.042	0.074
	727037	72703720B03020	TT	415.8	573.7	36					0.193	0.264	0.004	0.197	0.033	0.022	0.042	0.074
	727037	72703720B030410	TT	412.9	563.9	28					0.193	0.254	0.004	0.197	0.033	0.022	0.042	0.074

WE THE MANUFACTURER HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BAS-C OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)

WITH SATISFACTORY RESULTS



T.C. U. MİLLİ İŞ İŞLETİMİ VE SANAYİ DİŞI TİCARET VE İNŞAAT MINİSTERİSİ
TEST CERTIFICATE
DATE : 10/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 6

TEST CERTIFICATE
EN 10204 - 2004 TYPE 3.1
ITEM NO: 78603200709
DIMENSIONS, mm : 12.700 X 2438 X 6096 { 0.500 X 36 X 240 INCH |
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

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TEST CERTIFICATE
EN 10204 - 2004 TYPE 3.1
ITEM NO: 78603200709
DIMENSIONS, mm : 12.700 X 2438 X 6096 { 0.500 X 36 X 240 INCH |
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

www.erdemir.com.tr

ERDEMİR İŞLETME ÇEVİK FABRİKALARI T.A.S.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 8

WIRTH STEEL

ORDER NO : 78603208709
DIMENSIONS, mm : 12.700 X 2438 X 6096 { 0.500 X 96 X 240 INCH }
STANDARD & GRADE : CSA G40.21-13 / ASTM A372-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : UKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO: 1
FULLY KILLED AND FINE GRAIN PRACTICE
NO MERCURY COMPOUNDS NO WELD REPAIR

PRODUCT INFORMATION

TICKET NO/WEIGHT (MT)	HEAT NO	MECHANICAL PROPERTIES			IMPACT TEST JQUIP POSITION	HIGH TEMP °C	AIR TEMP °C	YIELD VAL N/mm2	C %	Mn %	P %	S %	Si %	Al %	Cu %	Ni %	V %	N %	PPM
		COIL OR PLATE NO	P.S OR P.P TEST VAL	YIELD TEST VAL															
023704235512.3101	7270362050310	IT	432.5	575	7	34			0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050320	IT	432.5	575	7	34			0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050410	IT	408.9	581.5	32				0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050420	IT	408.9	581.5	32				0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050610	IT	432.5	575	7	34			0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050620	IT	432.5	575	7	34			0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362050910	IT	432.5	575	7	34			0.181	1.261	0.032	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070210	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070220	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070310	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070320	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070410	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070420	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070430	IT	415.2	573.7	36				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070440	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070450	IT	402.9	581.5	32				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070460	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070470	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070480	IT	432.5	575.7	34				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070490	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070500	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070510	IT	415.2	573.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070520	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070530	IT	402.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070540	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070550	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070560	IT	432.5	575.7	34				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070570	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070580	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070590	IT	415.2	573.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070600	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070610	IT	402.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070620	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070630	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070640	IT	432.5	575.7	34				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070650	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070660	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070670	IT	415.2	573.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070680	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070690	IT	402.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070700	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070710	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070720	IT	432.5	575.7	34				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070730	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070740	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070750	IT	415.2	573.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070760	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070770	IT	402.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070780	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070790	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070800	IT	432.5	575.7	34				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070810	IT	408.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070820	IT	408.9	561.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070830	IT	415.2	573.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070840	IT	415.8	575.7	36				0.184	1.264	0.022	0.004	0.197	0.033	0.022	0.042	0.074	45	
	7270362070850	IT	402.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070860	IT	406.9	581.5	32				0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270362070870	IT	432.5	575	7	34			0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45	
	7270																		

EREGET-DEMİR VE ÇELİK FİBRİTİKİT A.Ş.
OUTSTANDING CAPITAL 3.500.000.000 TL
PRODUCTION PLANT ERDEMİR

CUSTOMER ORDER NO : 7663208709
WIRTH STEEL

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO 9

DIMENSIONS, mm : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / G50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LURK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO: 112 MERCURY COMPOUNDS NO REED REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST		YIELD TEST % VAL.	BEND TEST % VAL.	STRENGTH TEST % VAL.	EL VAL.	POS YIELD % VAL.	TENSILE % VAL.	BH VAL.	TEST POSITION : N A R L	IMPACT TEST : NOTched Val.	TEST DATE	CHEMICAL COMPOSITION, CAST ANALYSIS									
			Ag	YIT											%	%	%	%	%	N				
0237042356/12.340	7227036	7227036/2086010	TT	408.9	581.5	32									10.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	7227036	7227036/2086020	TT	406.9	581.5	32									10.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	7227036	7227036/2086010	TT	432.5	575.7	34									10.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	7227036	7227036/2086020	TT	432.5	575.7	34									10.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	716634	716634/2030010	TT	424.6	572.7	32									10.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	716634	716634/20300120	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	441.3	590.4	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030020	TT	441.3	590.4	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030040	TT	441.3	590.4	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030020	TT	441.3	590.4	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	441.3	590.4	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634/2030010	TT	424.6	572.7	32									10.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716																							

PROGETTO DENTRIVE ÇELİK FİRMALARI T.A.S.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

WIRTH STEEL

: 76603208709

DIMENSIONS, mm : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO: 1
FULLY KILLED AND FINE GRAIN PRACTICE
NO MERCURY COMPOUNDS NO WELD REPAIR

PRODUCT INFORMATION

TICKET NO/WEIGHT (KG)	HEAT NO	COIL or PLATE NO	MECHANICAL TEST			V/T	IMPACT TEST, JARME	HARD POSITION	HIGH TEMP	CHEMICAL COMPOSITION, CAST ANALYSIS									
			PS or SAM	P.P	POS YIELD STRENGTH	BEND TEST BH	EL VAL.	N/M2 N/mm2	C %	Mn %	P %	S %	Si %	Al %	CU %	N %	PPM		
0237042358/12.310	716634	71663420200210	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		7023023010010	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
	716634	71663420100310	TT	424.6	572.7	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		17165320100320	TT	424.6	572.7	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
	716634	71663420100410	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		71663420100420	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
	716634	71663420200110	TT	424.6	572.7	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		71663420200320	TT	424.6	572.7	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
	716634	71663420200410	TT	441.3	593.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		71663420200420	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
0237042359/12.390		7023023010010	TT	441.3	590.4	32				0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
		727037	72703720100210	TT	412.9	563.9	28			0.193	1.246	0.022	0.044	0.026	0.033	0.027	0.049	0.075	
	727037	72703720100220	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
		727037	72703720100310	TT	415.8	573.7	36			0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720100320	TT	415.6	573.7	36				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720100410	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720100420	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720200110	TT	412.9	573.7	35				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720200120	TT	415.8	573.7	35				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
	727037	72703720200210	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074	
		727037	72703720200220	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
		727037	72703720200310	TT	412.9	563.9	28				0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200320	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200410	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200420	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200510	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200520	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200610	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200620	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200710	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200720	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200810	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200820	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200910	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720200920	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201010	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201020	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201110	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201120	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201210	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201220	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201310	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201320	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201410	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201420	TT	412.9	563.9	28					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201510	TT	412.9	573.7	35					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201520	TT	412.9	573.7	35					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201610	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201620	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201710	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201720	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201810	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201820	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201910	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720201920	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720202010	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720202020	TT	412.9	573.7	36					0.184	1.264	0.024	0.044	0.197	0.033	0.022	0.042	0.074
	727037	72703720202110	TT	412.9	573.7	36													

EREGIT DEMİR ve ÇELİK FABRİKALARI T.A.S.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE
EN 10204 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 11

CUSTOMER : WIRTH STEEL

ORDER NO : 7880320703

DIMENSIONS, mm : 12.700 X 2438 X 6066 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 J00W35W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO : 1
NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/HEAT NO (MT)	COIL OR PLATE NO	P.S OR P.P	TENSILE TEST SAN POS	YIELD TEST VAL.	TELE TEST VAL.	STRENGTH TEST VAL.	BEND TEST VAL.	IMPACT TEST, Toule OR HARDNESS VAL.	POSITION :	YIELD TEST VAL.	ANR TEST VAL.	YIELD TEST VAL.
3237042362/12.300			70230230171019/8									
	727037	7270372070419		TT 412.9	563.9	28						
	727037	7270372070420		TT 412.9	563.9	28						
	727037	7270372080310		TT 415.6	573.7	36						
	727037	7270372080120		TT 415.6	573.7	36						
	727037	7270372080210		TT 412.9	563.9	26						
	727037	7270372080220		TT 412.9	563.9	28						
	727037	7270372080310		TT 415.8	573.7	36						
	727037	7270372080320		TT 415.8	573.7	36						
0237042363/12.310			70230230181510/8									
	727037	7270372050413		TT 412.9	563.9	28						
	727037	7270372050420		TT 412.9	563.9	23						
	727037	7270372050421		TT 415.8	573.7	36						
	727037	7270372070120		TT 415.6	573.7	36						
	727037	7270372070210		TT 412.9	563.9	29						
	727037	7270372070226		TT 412.9	563.9	29						
	727037	7270372070310		TT 415.8	573.7	36						
	727037	7270372070320		TT 415.6	573.7	36						
0237042364/12.310			7023023019010/9									
	727037	7270372080210		TT 412.9	563.9	28						

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 J00W35W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE : T-Top, M-Middle, E-End, T-Transverse, L-Lateralitudinal, P-Piece of Slice, P-Piece of Plate
WES Number (Istanbul Head Office): 0352 3206 4260-0220, Trade Registry Number (Istanbul Department): 50659, Trade Registry Number (Erzurum Department): 15741272
Head Office (Istanbul Barba's Mah. Ardit Sok. No: 6 34746 Ataşehir İSTANBUL - TURKEY
www.erdemir.com.tr



www.erdemir.com.tr

OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMIR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 12

WIRTH STEEL

: 78803208709

: 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)

: CSA G40 21-13 / ASTM A572-15 30B/N/35N / G50 TYPE 2(ERDEMIR 3246)

STANDARD & GRADE

DIMENSIONS, mm

PRODUCT TYPE & DEFINITION : LRR : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO : I
NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S. TEST or SAM TEST	BEND TEST	YIT TEST	TEST POSITION	TEMP °C	CHEMICAL COMPOSITION, CAST ANALYSIS												
								POS	YIELD STRENGTH	EL	TEST BH	HARDNESS	VAL	VAL	C	Mn	P	S	Si	Al
023704241412.3701	727037	7270372050220	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703722305316	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720502120	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720502110	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720502220	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720503119	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720503220	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720503210	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720504101	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	7270372050420	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720501101	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720501201	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720501101	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727037	72703720501201	TT	412.9	563.9	28									0.184	1.264	0.024	0.004	0.197	0.033
	727036	72703620502110	TT	408.9	501.6	32									0.181	1.261	0.022	0.004	0.198	0.026
	727036	7270362050220	TT	408.9	501.5	32									0.181	1.261	0.022	0.004	0.198	0.026
	727036	72703620501101	TT	432.5	515.7	34									0.181	1.261	0.022	0.004	0.198	0.026
	727036	72703620501201	TT	432.5	515.7	34									0.181	1.261	0.022	0.004	0.198	0.026
	727036	72703620501101	TT	408.9	501.5	32									0.181	1.261	0.022	0.004	0.198	0.026

WE THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 30B/N/35N / G50 TYPE 2(ERDEMIR 3246).

WITH SATISFACTORY RESULTS

WEI THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 30B/N/35N / G50 TYPE 2(ERDEMIR 3246).

WITH SATISFACTORY RESULTS



YÖNETİCİ : T. İLG. M. M. CİDDE, İ. EN, T. TRANSVERSE, L. LEGİONAL, P. S. PIECE OF SIZE, P. E. PIECE OF SIZE

VESEN'S NAME : İsmail H. İŞMAİL, Head Office : 0352-9305-4320 Trace Registry Number : İstanbılı Department : 90559 Trace Registry Number : İstanbılı Department : 157035



HEAD OFFICE : İSTANBUL Barış Mah. Ardit. Sok. No: 6 34746 Ataşehir İSTANBUL - TURKEY

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PRESIDENT: M. ERDEMIR
OUTSTANDING CAPITAL: 3.500.000 TL
PRODUCTION PLANT: ERDEMIR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

CUSTOMER
ORDER NO:

WIRTH STEEL
776603208709

DIMENSIONS, mm
STANDARD & GRADE
PRODUCT TYPE & DEFINITION: LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE
CSA G40 21-13 / ASTM A372-15 300W/350W / GR50 TYPE 2(ERDEMIR 3246)

LOT NO: 1
NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION

TICKET NO/WEIGHT (MT)	HEAT NO	COIL OR PLATE NO	MECHANICAL TESTS			IMPACT TEST, JIULE POSITION:	HIGH TEMP °C	CHEMICAL COMPOSITION, CAST ANALYSIS									
			PS or SM	TENSILE TEST P/P YIELD STRENGTH N/mm2	BEND TEST BH EL VAL. VAL.			C %	Mn %	P %	S %	Si %	Al %	Ni %			
0237042545/12.300	727036	77703620300220	TT	408.9	581.5	32		0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	727036	77703620300310	TT	432.5	575.7	34		0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	727036	77703620300320	TT	432.5	575.7	34		0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500310	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	716634	71663420500320	TT	424.6	572.7	32		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600110	TT	415.8	573.7	36		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600120	TT	415.8	573.7	36		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600210	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600220	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600310	TT	415.8	573.7	36		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600320	TT	415.8	573.7	36		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600410	TT	412.9	563.9	28		0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45
	727037	72703720600420	TT	412.9	563.9	28		0.193									

ERFURT-DEMRATH-GRÄFENBERG
OUTSTANDING CAPITAL 3,500,000,000 TL
PROVISIONS MADE

TEST CERTIFICATE
EN 10204 - 2004 TYPE 3.1

WIRTH STEEL
78603208709

12.700 X 2438 X 6096 [0.500 X .96 X 240 INCH]
 CSA G40.21-13 / ASTM A372-15 300MW/350W / GR50 TYPE
 LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO: 1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GONE IN BOVETTE

WE THE MANUFACTURER HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF
CSA G/C 21-13 : ASTM A177-15 300W-35W : GSC TYPE 2 (EFBMR 326) WITH SATISFACTORY RESULTS



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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION					
CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				
ENGINEERING SIGNOFF (if required)					
INSPPECTED BY: DAS	SIGNED OFF BY:	DATE: 11 APR 10 2018			

TESTERS LOCATED IN THE QUALITY OFFICE

DESCRIPTION	NCR (Check Y/N)	COMMENTS
CORRECT FINISH	Y	
CORROSION	N	
CORRECT GRAIN DIRECTION	Y	
CORRECT MATERIAL PER MDRAWING	Y	
CORRECT THICKNESS	N	
PHOTO REQUIRED	Y	
CORRECT MATERIAL IDENTIFICATION	Y	
CORRECT M# ON THE MATERIAL	Y	
DOES THIS MATERIAL REQUIRE	N	
ENGINEERING SIGN OFF	Y	
EXTRUSION REPORT	Y	
DOES THIS REQUIRE AN	N	
SIZE OF TEST SAMPLE		
TYPE OF MATERIAL		
HARDNESS / DUROMETER READING		

MATERIAL CERT REC'D: YES DATE: APR 10 2018
 QUANTITY RECEIVED: 34 QUANTITY REJECTED: 0
 SHEET SIZE ORDERED: 1.000 SHEET SIZE RECEIVED: 1.000
 THICKNESS RECEIVED: 1.000 THICKNESS ORDERED: 1.000
 MATERIAL CERT REC'D: NO DATE: APR 10 2018
 QUANTITY RECEIVED: 34 QUANTITY REJECTED: 0
 SHEET SIZE ORDERED: 1.000 SHEET SIZE RECEIVED: 1.000
 THICKNESS RECEIVED: 1.000 THICKNESS ORDERED: 1.000

MATERIAL: 1166116BL.000X04.000 PO / BATCH NO: 039321/503687

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:

QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117A12841154116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B | T.TTT | X | WWW.WWW|

THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES

"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

R
RELEASED
2009-05-02
MJD

B	REMOVE QQ-A-250/1 OPTION, REFORMAT NOTES, ADD	CP	09.07.13
A	ASTM B211/B221 (2N D7-1)		
REV	NEW ISSUE	DS	01.06.08
DESIGN	DS	BY	DATE
DRAWN	DART AEROSPACE LTD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JSS</i>	DRAWING NO.	
MFG. APPR.	<i>JSS</i>	M6061T6B	REV. B
APPROVED	<i>MJD</i>	TITLE	SHEET 1 OF 1
DE APPR.	<i>MJD</i>	6061-T6 BAR	SCALE
DATE	09.07.13	NTS	
		PROPRIETARY & CONFIDENTIAL © 2009 DART AEROSPACE LTD. NOT TO BE USED, COPIED, OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF DART AEROSPACE LTD.	

Attach this inspection sheet with the corresponding material cert and permit to be scanned and received in

GC 1B INSPECTION	ENGINEERING SIGNOFF (if required)	DAS	INSPECTED BY: <u>11</u>	SIGNED OFF BY: <u>11</u>	DATE: <u>APR 10 2018</u> <u>3-BG</u>
------------------	-----------------------------------	-----	-------------------------	--------------------------	---

DESCRIPTION	COMMENTS	NCR (check Y/N)	SURFACE DAMAGE	Y
CORROSION	Y	N	CORRECT FINISH	N
CORROSION	N	N	CORRECT GRAIN DIRECTION	N
CORRECT MATERIAL PER DRWING	N	N	CORRECT MATERIAL DIRECTION	N
PHOTO REQUIRED	Y	N	CORRECT THICKNESS	N
CORRECT REF # TO LINK CERT	N	N	CORRECT MATERIAL IDENTIFICATION	N
CORRECT M# ON THE MATERIAL	Y	N	CORRECT MATERIAL IDENTIFICATION	N
DOES THIS MATERIAL REQUIRE	Y	N	ENGINEERING SIGN OFF	N
DOES THIS REQUIRE AN	Y	N	EXTRUSION REPORT	N

MATERIAL CERT REC'D:	YES	QUANTITY RECEIVED:	65
THICKNESS ORDERED:	WQ-120	QUANTITY INSPECTED:	65
THICKNESS RECEIVED:	WQ-120	QUANTITY REJECTED:	0
THICKNESS ORDERED:	WQ-120	SHEET SIZE RECEIVED:	A4/A4
THICKNESS RECEIVED:	WQ-120	QUANTITY RECEIVED:	65

MATERIAL: MT-A513-T8&T5_WD-120 DATE: APR 10 2018
PO / BATCH NO.: Q3958A1/S05986

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW RELEASE	17455	17.09.06	VM	WMA
B	TYPE 5 ADDED, TEMPLATE UPDATED	17-J90	17.12.13	VM	ML

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
B									
B									

B

A	8	7	6	5	4	3	2	1	1
B									
B									

B

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
B									
B									

B

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
C									
D									

C

D

A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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A	8	7	6	5	4	3	2	1	1
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D									

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC IS INSPECTION		ENGINEERING SIGN OFF (if required)		
INSPECTED BY:	11	SIGNED OFF BY:		
		DATE: 9-89 APR 10 2018		
HARDNESS / DUROMETER READING				
SIZE OF TEST SAMPLE				
TYPE OF MATERIAL				
HRc	HRB	DUR A	DUR D	WEBSTER

RECORD RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
TESTERS LOCATED IN THE QUALITY OFFICE					
EXTRUSION REPORT	Y	N	DOES THIS REQUIRE AN	Y	N
ENGINEERING SIGN OFF	Y	N	CORRECT M# ON THE MATERIAL	Y	N
DOES THIS MATERIAL REQUIRE	Y	N	CORRECT MATERIAL IDENTIFICATION	Y	N
CORRECT REF # TO LINK CERT	Y	N	CORRECT THICKNESS	Y	N
PHOTO REQUIRED	Y	N	CORRECT MATERIAL DRAWING	Y	N
CORRECT THICKNESS	Y	N	CORRECT GRAIN DIRECTION	Y	N
CORRECT MATERIAL DRAWING	Y	N	CORROSION	Y	N
CORRECT GRAIN DIRECTION	Y	N	SURFACE DAMAGE	Y	N
CORROSION	Y	N	COMMENTS		

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SHEET SIZE RECEIVED:	1.125	
THICKNESS RECEIVED:	1.125	
QUANTITY RECEIVED:	20	
MATERIAL CERT REC'D:	YES	
PO / BATCH NO.: 038321/5059685	DATE: APR 10 2018	
THICKNESS ORDERED:	1.125	
QUANTITY INSPECTED:	20	
SHEET SIZE ORDERED:	1.125	
SHET SIZE RECEIVED:	1.125	
QUANTITY RECEIVED:	20	
MATERIAL CERT REC'D:	YES	
PO / BATCH NO.: 038321/5059685	DATE: APR 10 2018	

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

D

D

PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR

SPECIFICATION: MIL-S-7097 OR ASTM A108

PART NUMBER:

M1018-R^D DDD WHERE D.DDD = DIAMETER IN INCHES

E.G. 7/8" ROUND BAR = M1018-R0.875

TOLERANCES: PER ASTM A108 AS FOLLOWS:

SIZE	TOLERANCE
UP TO 1.5"	+0.000/-0.007
OVER 1.5" TO 2.5"	*0.000/-0.003
OVER 2.5" TO 4.0"	+0.000/-0.004
OVER 4.0" TO 6.0"	+0.000/-0.005
OVER 6.0" TO 8.0" INCL.	+0.000/-0.006

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RELEASE
2012-09-24

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B	REFORMAT, ADD ASTM A108, ADD TOLERANCES		CP	12/09/05
A	NEW ISSUE		DS	01/06/12
REV	DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD		
DRAWN	CP	HAWKESBURY, ONTARIO, CANADA		
CHECKED	A.P.	DRAWING NO.	REV. B	
MFG APPR.		M1018-R	SHEET 1 OF 1	
APPROVED		TITLE	SCALE	
DE APPR.		1018-1025 ROUND BAR	NTS	
DATE	12/09/05	Copyright © 2011 by DART AEROSPACE LTD		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	INSPECTED BY: DAS	SIGNED OFF BY:	DATE: APR 10 2018
ATTACH THIS INSPECTION SHEET WITH THE CORRESPONDING MATERIAL CERT AND REMIT TO BE SCANNED AND RECEIVED IN					

TYPE OF MATERIAL	RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					
TESTERS LOCATED IN THE QUALITY OFFICE					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
TESTERS LOCATED IN THE QUALITY OFFICE		

MATERIAL CERT REC'D: YES DATE: APR 10 2018
 QUANTITY RECEIVED: 3241 QUANTITY REJECTED: 0
 QUANTITY INSPECTED: 3241 SHEET SIZE RECEIVED: N/A
 SHEET SIZE ORDERED: N/A
 THICKNESS RECEIVED: 0.375 THICKNESS ORDERED: 0.375
 MATERIAL CERT REC'D: YES DATE: APR 10 2018
 QUANTITY RECEIVED: 3241 QUANTITY REJECTED: 0
 QUANTITY INSPECTED: 3241 SHEET SIZE RECEIVED: N/A
 SHEET SIZE ORDERED: N/A
 THICKNESS RECEIVED: 0.375 THICKNESS ORDERED: 0.375

MATERIAL: M304RQ375 PO / BATCH NO: 0395A1/5036688 DATE: APR 10 2018

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR
NOTE: AISI 304 NOT AVAILABLE IN ENDS

SPECIFICATION: **ASTM A276**

PART NUMBER: M304R10-DBB
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M304R0.750

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI304/316 SS ROUND BAR

(NOTE: AISI 303 NOT ACCEPTABLE)

SPECIFICATION: *ASTM A276*

PART NUMBER:

M304R0.750

DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

E.G. 0.75" ROUND BAR = M304R0.750

RELEASED
10/23/07

B	REFORMAT DNG. ADD SPECS (ZN 08-1). REF-PAR-08-020A	C/P	09 07 15
A	NEW ISSUE	AJS	08 03 03
REV.	DESCRIPTION		
DESIGN	DART AEROSPACE LTD		
DRAWN	<i>AJS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	
MFG. APPR.	<i>AS</i>	M304R	
APPROVED	<i>AS</i>	TITLE	
DE APPROV.	<i>AS</i>	304/316 ROUND BAR	
DATE	09 07 15	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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Attach this inspection sheet with the corresponding material cert and permit to be scanned and received in

OC 18 INSPECTION		DA'S	ENGINEERING SIGNOFF (if required)		
INSPECTED BY:	9-89	SIGNED OFF BY:	DATE: APR 10 2018		
HARDNESS / DUROMETER READING					
SIZE OF TEST SAMPLE					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
RECORD RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <i>N/A</i>	CORRECT THICKNESS
CORROSION	Y <i>N/A</i>	PHOTO REQUIRED
CORRECT GRAIN DIRECTION	Y <i>N/A</i>	CORRECT MATERIAL IDENTIFICATION
CORRECT MATERIAL PER DRAWING	Y <i>N/A</i>	DOES THIS MATERIAL REQUIRE SIGN OFF
CORRECT THICKNESS	Y <i>N/A</i>	DOES THIS MATERIAL REQUIRE M# ON THE MATERIAL
PHOTO REQUIRED	Y <i>N/A</i>	DOES THIS MATERIAL REQUIRE A CERT
CORRECT REF # TO LINK CERT	X <i>N/A</i>	EXTRUSION REPORT
CORRECT MATERIAL IDENTIFICATION	X <i>N/A</i>	TESTS LOCATED IN THE QUALITY OFFICE
DOES THIS MATERIAL REQUIRE M# ON THE MATERIAL	Y <i>N/A</i>	
DOES THIS MATERIAL REQUIRE A CERT	Y <i>N/A</i>	
EXTRUSION REPORT	Y <i>N/A</i>	

MATERIAL CERT REC'D: *yes* DATE: *APR 10 2018*
 QUANTITY RECEIVED: *0.500* SHEET SIZE RECEIVED: *0.500*
 QUANTITY INSPECTED: *0.500* SHEET SIZE ORDERED: *0.500*
 THICKNESS RECEIVED: *0.500* SHEET SIZE RECEIVED: *0.500*
 QUANTITY RECEIVED: *0.500* SHEET SIZE ORDERED: *0.500*

MATERIAL: *M1-H85-B0.500A2.250* PO / BATCH NO: *039521/5039689* DATE: *APR 10 2018*

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

HOT ROLLED STEEL PLATE
ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

SPECIFICATION:

MT-HRS-P-(T.TTT)

WHERE T.TTT IS PLATE THICKNESS IN INCHES

PART NUMBER:

MT-HRS-P-0.750

TOLERANCES PER MANUFACTURER SPECIFICATIONS

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
B	REMOVED LENGTH AND WIDTH DIMENSIONS	17-675	26/09/2017	SAC	WM

A	B	C
DART AEROSPACE Hamilton, Ontario, Canada FILE#: MT-HRS-P REV#: B ITEM#: HOT ROLLED STEEL PLATE PRINTED: 09/05/2017 DEFINITION BY: SAC 9/05/2017 REV: B DESIGN BY: SAC 09/02/2017 REV: B CHECKED: VMA 09/02/2017 1. NAME 2. DATE 3. APPROVAL REQD: DIP 09/02/2017 1. NAME 2. DATE 3. APPROVAL APPROVED: DIP 09/05/2017 1. NAME 2. DATE 3. APPROVAL SCALE: NTS WEIGHT: N/A SHIPPING UNITS: N/A COPYRIGHT © 2017 BY DART AEROSPACE LTD <small>THE USE AND/OR REPRODUCTION OF THIS DRAWING IS RESTRICTED TO THE PERSONNEL INVOLVED IN THE PROJECT AND IS NOT TO BE COPIED OR COMMUNICATED OUTSIDE THE PROJECT TEAM. IT IS THE PROPERTY OF DART AEROSPACE LTD AND IS SUBJECT TO CONFIDENTIALITY AGREEMENTS.</small>		
8	7	6
7	6	5
6	5	4
5	4	3
4	3	2
3	2	1
2	1	D
1	C	B
0	B	A

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

INSPECTED BY:	SIGNED OFF BY:	DATE:
		APR 10 2018
ENGINEERING SIGNOFF (if required)		
AC 18 INSPECTION		

TYPE OF MATERIAL	RECORD RESULTS BELOW					TESTERS LOCATED IN THE QUALITY OFFICE
	HR C	HR B	DUR A	DUR D	WEBSTER	
HARDNESS / DUROMETER READING						
SIZE OF TEST SAMPLE						

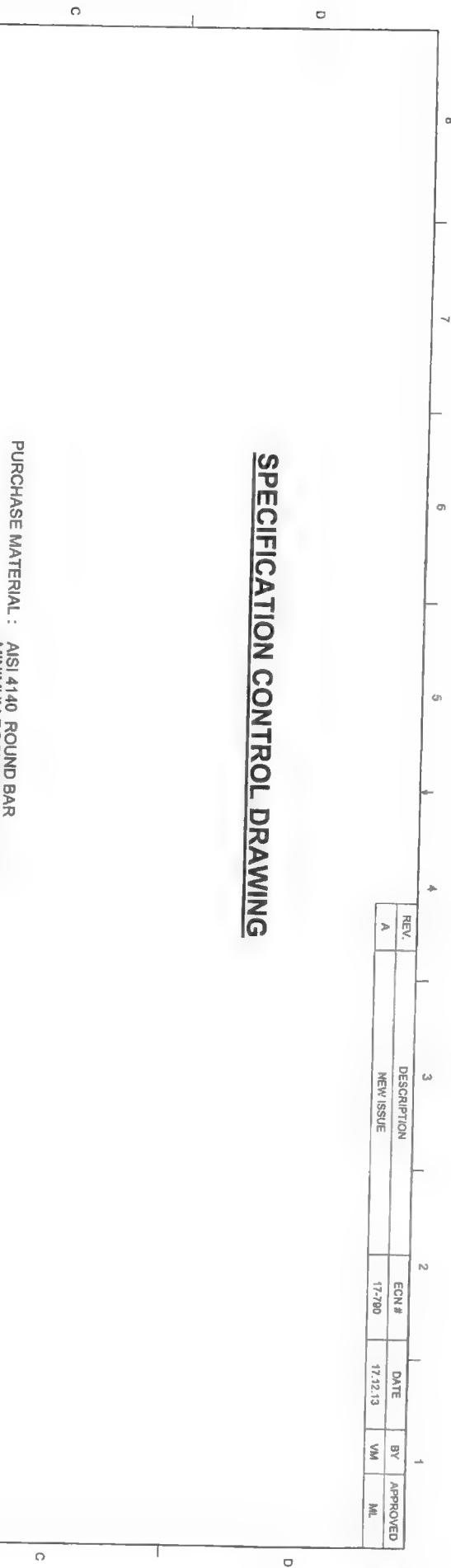
DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.		

MATERIAL CERT REC'D: Y DATE: APR 10 2018
 PO / BATCH NO.: MT-4140-R0625
 MATERIAL THICKNESS ORDERED: 0.625 QUANTITY RECEIVED: 20
 SHEET SIZE ORDERED: 11x14 QUANTITY INSPECTED: 20
 SHEET SIZE RECEIVED: 11x14 QUANTITY REJECTED: 0
 THICKNESS RECEIVED: 0.625

MATERIAL: MT-4140-R0625 DATE: APR 10 2018
 PO / BATCH NO.: 039521/5059692

SPECIFICATION CONTROL DRAWING

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-90	17.12.13	VM	M.



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PURCHASE MATERIAL: AISI 4140 ROUND BAR

MINIMUM ROCKWELL C = 20 RC

MAXIMUM ROCKWELL C = 38 RC

SPECIFICATION:

ASTM A29 AMS 6349, AMS 6382, AMS 6529

PART NUMBER:

MT-4140-R-[D,DDD]

WHERE "D,DDD" = DIAMETER IN INCHES

EX. 4" ROUND BAR = MT-4140-R-4.000

DART AEROSPACE Headquarters, Chicago, Illinois	
AISI 4140 ROUND BAR	
PART NO	MT-4140-R
TOOL NO	REV
INITIALS AND DATE	INITIALS AND DATE
DESIGNED BY:	VM 17/12/2013
DRAWN BY:	VM 17/12/2017
CHECKED BY:	ML 12/12/2017
MFG REVIEW BY:	DP 12/20/2017
APPROVED BY:	ML 12/20/2017
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FRACTIONAL TOLERANCES: $\pm \frac{1}{16}$, $\pm \frac{1}{32}$, $\pm \frac{1}{64}$, $\pm \frac{1}{128}$

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FRACTIONAL TOLERANCES: $\pm \frac{1}{16}$, $\pm \frac{1}{32}$, $\pm \frac{1}{64}$, $\pm \frac{1}{128}$

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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION	ENGINEERING SIGN OFF (if required)
INSPPECTED BY: DAS	SIGNED OFF BY: 11
DATE: 9-APR-10 2018	DATE:

RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
CUT SAMPLE PIECE OF MATERIAL AND PREFERM A HARDNESS CHECK.					

DESCRIPTION	NCR	Comments
CORRECT DRAWING	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
SIZE OF TEST SAMPLE		
TYPE OF MATERIAL		

MATERIAL CERT REC'D:	Yes
THICKNESS ORDERED:	0.500
THICKNESS RECEIVED:	0.500
QUANTITY RECEIVED:	24
QUANTITY INSPECTED:	24
SHET SIZE ORDERED:	24
SHET SIZE RECEIVED:	24
QUANTITY REJECTED:	0

MATERIAL: **M7144-H0500** PO / BATCH NO: **039531/5035691** DATE: **APR 10 2018**

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-507	18.1.17	VM	ML

PURCHASE MATERIAL: AISI 1144 STRESSPROOF STEEL HEX BAR
 SPECIFICATION: ASTM A311 OR UNS G11440
 PART NUMBER: MT-1144-H[D.DDD]
 WHERE "D.DDD" = DIAMETER IN INCHES
 EG. 5/8" HEX BAR = MT-1144-H0.625

DART AEROSPACE		HawkerBay, Ontario, Canada
TITLE		
AISI 1144 STRESSPROOF STEEL HEX BAR		
PART NO.	MT-1144-H	
TOOL NO.	REV	
INITIALS AND DATE		
DESIGNED BY:	VM 180117	
DRAWN BY:	VM 01172018	
CHECKED BY:	X	
APPROVED BY:	DP 01172018	
SCALE: ATTS. SHEET OF 1		
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8 7 6 5 4 3 2 1

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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGN OFF (if required)
INSPECTED BY:	DAS	SIGNED OFF BY:
		DATE: 9-89APR 10 2018
TESTERS LOCATED IN THE QUALITY OFFICE		

TYPE OF MATERIAL	RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D	WEBSTER
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT READING	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER-MILLING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERI AL# ON THE MATERIAL	<input checked="" type="checkbox"/>	
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
SIZE OF TEST SAMPLE		
HARDNESS / DUROMETER READING		

MATERIAL CERT REC'D: YES
THICKNESS RECEIVED: 0.250
THICKNESS ORDERED: 0.250
QUANTITY RECEIVED: 12
QUANTITY INSPECTED: 12
SHEET SIZE ORDERED:
SHEET SIZE RECEIVED:
QUANTITY REJECTED:
SHEET SIZE RECEIVED:
DATE: APR 10 2018

MATERIAL: MT-1144-H0.250
PO / BATCH NO.: 059521/5036690

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

REV.	1	3	2	1	4
A	NEW ISSUE		ECN #	DATE	BY
			18-507	18.1.17	VM

A	B	C	D
			8 7 6 5 4 3 2 1 0

PURCHASE MATERIAL: AISI 1144 STRESSPROOF STEEL HEX BAR
 SPECIFICATION: ASTM A311 or UNS G11440
 PART NUMBER: MT-1144-H[D,DDD]
 WHERE "D,DDD" = DIAMETER IN INCHES
 EG. 5/8" HEX BAR = MT-1144-H0.625

 DART <small>AEROSPACE</small> <i>Headquarters: Ontario, Canada</i>	
TITLE	
AISI 1144 STRESSPROOF STEEL HEX BAR	
PART NO.	
MT-1144-H	
Tool No.	REV.
A	A
INITIALS AND DATE <small>INITIALS OF PERSONNEL WHO APPROVED THIS DRAWING</small> <small>INITIALS OF PERSONNEL WHO APPROVED THIS DRAWING</small>	
DEBRIEFED BY:	VM 18/01/17
DRAWN BY:	VM 01/12/2016
CHECKED BY:	VM 01/12/2016
INFO REVIEW BY:	DP 01/12/2016
APPROVED BY:	ML 01/12/2016
SCALE 1:1	
SHEET OF 1	
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